

# Phillip Trudeau-Tavara

 [phone hidden]  [email hidden]  [github.com/pmttavara](https://github.com/pmttavara)

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A dedicated, quality-oriented programmer looking to improve his skills in large-scale software development and to apply his experience operating in performance-sensitive and systems environments, as well as agile user-focused environments. Good team player and public speaker with a result-oriented mindset to development.

## Freelance

### ToolGal Tool Manager

**Requirements elicitation, software engineering, programming, design**

**Q4 2017-Q1 2019**

Contract to develop an enterprise software application for the tool crib operators at George Brown College

*Performed requirements elicitation from stakeholders' user stories*

*Designed & implemented the full software stack from UI to database, delivering features promptly & fully functional*

Enterprise data entry and database management tool for POS-like tool lending

Fully-featured transaction system for loaning, returning, and timestamping tools

C++ GUI program using SDL; custom UI, input, rendering; manual & O(1) memory management

## Skills

5 years' experience in C/C++

Languages: C++14, C99, C#, assembly (x64 + SIMD, 6502), Go, Java, Python

Frameworks: Win32 (COM, WinForms), OpenGL, SDL, LINQ, Unity, Source SDK, Web front/backend

Apps: Visual Studio - Trello - Slack - After Effects - Vegas Pro - Flash - Photoshop - Illustrator

Theory: Numerical analysis, IEEE 754 engineering, circuit design, engine/systems programming, graph theory, number theory, cryptography, linear algebra, DSP & audio code

Education: BSc Computer Science, Ryerson University.....Sep 2016-Apr 2018

SATEC @ W.A. Porter Collegiate Institute.....Sep 2012-Jun 2016

## Software

### Light After Dark

**Programming, design**

**Q3 2017; Q3 2018**

*Worked in a 3-person team under a 2-day deadline*

*Established an expedited workflow with team members for integrating assets (textures/sounds)*

Interactive Windows C++ application with physics, particles, lighting

### No Survivors

**Programming, design**

**Q1 2016; Q4 2018**

*Established team asset pipeline for 3D models and materials as well as 2D textures*

Spaceflight simulator written in C# using Unity Engine

6 fully destructible spacecraft; mobility degrades as thrusters break

Correctly proportioned astronomical bodies and equations of orbital motion

### 2D Game Engine

**Programming, software engineering**

**Q2 2015-Q2 2017**

Interactive multi-platform application written in C++

Custom physics, entity, graphics, and particle systems

Custom-implemented standard library and robust unit conversion code

### Rocket Man

**Art direction, art asset production**

**Q2 2015**

Interactive application using Unity engine

*Established team asset workflow under 1-month deadline*